NEW ENGLAND FARMER.

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AGRICULTURE.

FOR THE NEW ENGLAND FARMER.

A USEFUL ARTICLE OF AMERICAN MANUFACTURE.

[The following is a copy of a Letter addressed to the Hon. JOSIAH QUINCY, Esq. Mayor of the City of Boston:]

Sir,—I send you a sample of that article commonly called *Groats*, by foreigners.

I have taken the liberty, (being a citizen of the State of Vermont) to give the article a new name, VERMONT RICE.

The grain from which this article is manufactured, is common in all sections of the United States, particularly in New England. I have been in the habit of manufacturing it for about twenty years, and am decidedly of an opinion, that in the New England States it ought to take the place of southern rice.

Vermont Rice is prepared and cooked in the same manner the southern rice is, except that it takes a little longer. It makes excellent puddings to eat with milk, and when prepared and properly dressed, with spices, eggs, &c. it will make a baked pudding superior to rice; and, I have no hesitation in saying, that it is preferable for food, either in health or sickness. It is now kept by all druggists in New England, in a pulverized state; retailed for medicine, and recommended and approved by all physicians.

Perhaps, Sir, you will be surprised, on being informed that this article is nothing more than the kernel of our common OATS: I refer you to my communication to the Editor of the New England Farmer, published in vol. I. page 258 of that paper. From common oats, weighing not less than thirty-two pounds per bushel, I manufacture oat flour and meal. Oats weighing 38 pounds per bushel and over will answer, when properly manufactured, for this species of rice.

I will observe here, that oats which are designed for meal or rice, require to be harvested early, and well preserved. Oats which are wet in the field, heat in the mow or bin, are unfit to make either oat flour, meal, or rice. I design to furnish a friend of mine in the city of Boston with the first quantity of oat flour, meal, and Vermont rice of my own manufacture, and the same will be offered for sale by the pound or barrel.

I also manufacture, extensively, Pearl Barley, not equal, however, in point of *appearance*, to the foreign, but equal in *substance*. Any gentlemen wishing for more particular information respecting the manufacturing of oats, or wishing to purchase any quantity of the aforesaid manufacture articles, will please address a line to me.

Yours, with respect,

HENRY STEVENS.

Barnet, Vermont, Feb. 1st, 1828.

[The following is the communication referred to above.]

OATS.

"The subject which I propose, is that of the more extensive cultivation of oats. Various are the kinds of oats. The Barley or Scotch oats, so called, I have cultivated, but not with very great success; their weight is generally about 42 lbs. per bushel. I have seldom been able to raise more than from 20 to 25 bushels per acre. The black oats I have cultivated; their weight is about 36 lbs. per bushel, and produce about as many bushels per acre as the barley or Scotch oats. The greatest objection I have to the barley or Scotch oats, is, that they must be harvested suddenly after they are fit, in order to prevent waste. The common oats which are raised, I consider preferable. My average crop of late years has been from 40 to 50 bushels per acre, and in one instance 65 bushels per acre.

"I make oats principally, and generally speaking, my first crop in the line of a rotation of crops. I break up the piece intended for this crop in the fall, if possible, and in the spring cross plough and harrow thoroughly before I sow my grain; then harrow again until the turf is well pulverized; then sow ten bushels of clover seed chaff per acre, and roll it in. As soon as the grain is harvested, and the young clover has received its growth, I plough it in. This clover with the stubble, is about equal to a common dressing of compost manure. In the fall, plough; in the spring I cross plough, after taking from my compost heap thirty loads per acre, which are carefully spread. The lot then being well harrowed and furrowed is ready for planting, either with corn, potatoes or turnips. This is my second crop.—For my third crop I again sow wheat, peas, flax, oats, &c. and stock the lot down with herds grass and red top, which I believe make the best of hay. I let the lot remain in grass three years.—Thus you will observe I till three years, and mow or pasture three years. My first and third crop is principally oats.

I have frequently been told that oats and corn were very impoverishing crops; but I find no difficulty in enriching my land as above stated. Ten years ago my average crop of corn was from 30 to 40 bushels per acre. But in passing over a lot the second time which was managed as above in the summer of 1821. I had the satisfaction of harvesting 96 bushels of corn per acre, and received the Society's premium. My other crops have advanced in about the same proportion.

The inquiry will naturally be made, what I do with my oats? Well, sir, after I have reserved for my stock and for seed, I take the remainder to my mill and manufacture them into flour and meal. It will be understood that the oats are kiln dried, then hulled about as clean as rice, then ground, and bolted or sifted, as the case may be. That which I bolt is calculated to be mixed with wheat flour for bread; in which case the oat flour being kiln dried, must be scalded before it is mixed with the wheat flour, otherwise the bread will be too dry. Good oat flour, prepared as above, mixed with wheat flour, half and half, will make as light and pleasant bread as common country wheat flour, and it will trouble good judges of bread to tell it from clear flour bread. Again, it is excellent to make butter-cake, by the Yankees called slapjacks. The oat meal is calculated for puddings, and is a substitute for rye meal to mix with corn meal for bread, or with rye meal for bread. In either case the oatmeal must be scalded before it is mixed.

Thus after supplying my family, the remainder is for market. The oat flour I have generally sold in Boston and New York to the druggists. The meal is also purchased by the druggists. I have generally sold them oat flour for from four to five dollars per hundred, and the meal from three dollars fifty to four fifty, which is, by them, retailed as medicine, from twelve to twenty cents per pound.

The meal is frequently bought by foreigners by the barrel or hundred, for family use. The sale of oat meal is at present limited; the reason is that but very few people in this country, save foreigners, are acquainted with the use of it, except for medicine. Foreigners generally prefer oat meal to flour. I really hope both for our health, and the interests of agriculture, that the time is not far distant, when oat flour and meal will be used in every family for food.

Much may be said as to the value of this for medicine, as well as for food. It has been a common article for food in Scotland and Ireland for many years. Seldom, if ever, an English, Scotch, or Irish vessel sailed without a supply of oat meal;—and I may say it would be well for every commander of an American vessel, in making up his order for ship stores, to include a sufficient quantity of oat meal or flour for his voyage.

As I am one of the homespun family, and wish for information, I hope these few remarks will draw something from more able writers.

H. STEVENS.

SHEEP AND WOOL.

[*Translated from the "Bulletin des Sciences Agricoles," for July*, 1827.—*By the Editor of the Hampshire Gazette.*

Sweden was the first nation that imported merino sheep from Spain. The earliest attempts to improve the native breeds were unfortunate, but in 1715 the efforts of the Swedish minister were successful.—Merinoes were introduced into Saxony in 1765. The number first purchased was 229. Saxony has attained to a greater degree of perfection in this branch of industry than any other nation.—In 1775 Maria-Theresa, bought 300 merinoes in Spain; these were the first that appeared in Austria.—The attempts of Prussia to introduce merinoes were not successful until 1816, when the king made large purchases in France.—The French government purchased 367 merinoes in Spain in 1786, and placed them at Rambouillet. They have since spread over the kingdom.—It was not till 1790 that merinoes were imported into England. They had many prejudices and much opposition to encounter; they have not been extensively propagated in that country.—The English love fat mutton, and prefer those breeds which will furnish them with the finest meat. They import merino wool from Spain and Saxony.—Italy has never attempted to improve her native breeds.

M. Ribbe endeavors to prove that there is a greater profit in crossing native sheep with merinoes, than in forming flocks entirely of the latter.

[According to the experiments of Dr Parry, a merino cultivator in England, the fifth cross brings the wool of the progeny to the same fineness as that of the merinoes.]

The various sorts of wool are coarse or fine, long or short, hard or soft, elastic or brittle, round or flat, crisped or not crisped. The fleece should be thick, and if it be well filled with oil, it is a sign of its excellence. The hairs or fibres of merino and Saxony wool should be round, even, bright, pliant, not breaking easily, and of suitable length. When wool unites these qualities, it is called in Saxony, Electoral wool.

[The wool of the sheep is nothing but crisped hair; in some varieties it resembles the hair of oxen, and in others the hair and wool are mixed.]

The filaments of merino wool should be well crisped or waved; the fineness of the fleece may be determined from the number of these curls and from their smallness. Wool of a superior quality has commonly 20 of these little bends. If merino sheep are not sheared, the wool continues to grow several years, but its growth diminishes every year, until it entirely ceases in the sixth, or at the latest, in the eighth year, when the extremities perish and become brown. The small races of sheep produce more and better wool than the large ones. Sheep with broad heads do not yield so fine wool as those with slender heads.—Merinoes at their birth are covered with little locks or tufts of curled wool, about as large as a grain of barley; the smaller these locks are, the finer the fleece will be; the closer they are together, the more abundant will be the wool.

CULTURE OF MANGEL WURTZEL.

Every man who assists in introducing the successful cultivation of any new variety in animal or vegetable life, which was before unknown or practised, and which promises to be more useful than any one of the like genus or species, before cultivated, deserves well of the public. This service, every farmer has, at times, an opportunity of performing. The Mangel Wurtzel holds forth this promise, in a more eminent degree, perhaps, than any other plant. It may be attempted, with hardly the possibility of disappointment or loss. There can be but little or no trouble or expense in making the experiment.

Why, then, will not every farmer, or horticulturist, make the trial in a small way, if it be not convenient to extend it beyond a little spot on his farm, or bed in his garden?

The Mangel Wurtzel is the *Beta-cicla* of the family of the *Beet*, sometimes called the *Root of Scarcity*, and likewise called the *White Beet*, much celebrated in England and Prussia.

Time of sowing, months of April and May.—Prepare a plat or field, as for turnips or potatoes; open two drills with the plough, two feet apart, and put in a sufficient quantity of dung, according to the ground; then cover the dung with the double mould board plough once, or the single plough twice, by ridging them up as high as can be well done, with a man shovelling between the drills right and left, smoothing the surface of the ridge above the dung, which will leave a space of ten or twelve inches broad. This complete method of fallowing will repay the trouble of shovelling, by raising a full proportion of earth under the roots. After sowing, it should be well rolled, which completes the whole process. The crop to be afterwards treated the same as that of turnips or potatoes, by pulling and taking off mould, &c. After the roots have been raised, the ground is in a remarkable fine situation for wheat or any other crop; sow five pounds per acre.—Soak the seed in pond or rain water, previous to sowing.

USE.—Almost all kinds of animals eat the leaves and roots, with great avidity. Both are peculiarly good for feeding swine, and are not less eagerly devoured than corn. They are excellent for milch cows, and possess the quality of making them give a large quantity of the best flavoured milk. They are said to be equally useful for fattening cattle.

Col. Powel, of Pennsylvania, has raised at the rate of 2,065 bushels per acre, weighing more than 44 tons. Messrs T. & H. Little, of Newbury, in 1824, raised on an acre 74,518 pounds of these roots.

From Cobbett's American Gardener.

GARDENING.

America has soil and climate for surpassing those of England; and yet she is surprisingly deficient in variety as well as quality of garden products. "I am not alluding to things of *ornament*, or appertaining to *luxurious* enjoyments, but to things that are really useful, and that tend to the preservation of health, without which latter, life is not worth having. It is incredible to those, who have not had occasion to observe the fact, how large a part of the sustenance of a country-laborer's family, in England, comes out of his little garden. The laborers of England are distinguished from those of other countries by several striking peculiarities; but, by no one are they so strongly distinguished as by their fondness of their gardens, and by the diligence, care and taste, which they show in the management of them. The reproach which Solomon (Proverbs, ch. 24, v. 30) affixes on the slothful and ignorant husbandman, they seem to have constantly in their minds; and to be constantly on the watch to prevent it from applying to themselves. Poverty may apologise for a dirty dress or an unshaven face; men may be negligent of their person; but the sentence of the whole nation is, that he, who is a sloven in his garden, is a sloven indeed. The inside of a laborer's house, his habits, his qualities as a workman, and almost his morality, may be judged of from the appearance of his garden.

It seems, at first sight, very odd that this taste for gardening should not have been preserved in America; but, it is accounted for by reflecting, that, where land is abundant, attachment and even attention to *small spots* wear away. To desire to possess land is an universal desire; and vanity makes us prefer quantity to quality. You may prove as clearly as daylight, that it is better, in certain cases, to possess one acre than a hundred; but where do you find the man that prefers the one acre? When large parcels of land are undertaken to be cultivated, small ones are held in contempt: and, though a good garden supplies so large a part of what is consumed by a family, and keeps supplying it all the year round too, there are many farmers even in England, who grudge even a wheelbarrow full of manure that is bestowed on a garden. The garden may, besides its intrinsic utility, be made to be a most valuable help-mate to the *Farm*.

Every American Farmer, north of Carolina, at least, ought to have a Hot-Bed in the Spring.

HINTS TO NEW ENGLAND FARMERS.

"*First*. The improvement of the character and qualities of all our domestic animals. It would not be extravagant to say that the expense and profits of raising stock would be beneficially affected by having the best races of every sort that are now known in Europe. New England will never be a grain country, any more than she will become the raiser of tobacco or cotton. But she *can* probaly supply two millions of people with beef, pork and wool.

"*Secondly*. To do this, she may and must use for half a century her natural pastures, because she cannot afford at present prices, to break up her uncultivated lands, but she *can* raise, and raise to advantage, by a succession of crops, a sufficient supply of succulent roots, such as the Swedish turnip—the Mangel Wurtzel or white beet, carrots, and potatoes, to come in aid of her cultivated and natural grass-lands, to support, and improve the condition of her stock of animals, to the extent of double, nay, I believe, treble their present numbers.

"They will not, they *cannot* exceed the *demand*, that must regulate the supply, after all we can say or write, but much may be done to enable us to raise cheaper and better animals. If *cheaper* the *demand* will be greater. We have done much in this way, but much remains to do.

"*Thirdly*, we are very deficient in Horticulture. To be sure there is no great profit in cash arising to the farmer from gardening beyond the limits of twenty miles from a great town, but when men have arrived to the degree of comfort which our farmers generally enjoy, they ought to seek innocent luxuries. We cannot hope or expect to see their front yards ornamented like those of the Dutch or English cottages, who are not worth a twentieth part as much as they are, with flowering shrubs and plants, so neat and so beautiful as to realize the description of the poets, who have descanted on pastoral life. This depends in those countries on fashion, and as the more opulent indulge in those luxuries, the others follow as imitators; but a delightful pear—an excellent plum or peach, or an admirable winter apple, fresh in April, would be as sweet to the palate of a farmer as to that of a luxurious and opulent merchant, and why these are neglected, I never could comprehend, as the labor amounts to a trifle in procuring and in preserving them.

"No farmer ought to be without his asparagus bed, which, once laid down, will last without his labor for forty years—no one ought to be without his patch of green peas—lettuce—early and late beans. If more attention were paid to these comforts, we should hear less of spotted and typhus fevers in our otherwise healthy villages, and our females in the country would be more proud of the grounds about their houses, and take more interest in their neatness and comfort than some, perhaps too many of them now do. We do not mean to say, there are not a great many farmers who pay some attention to these things, but the deficiency is deplorable."

From the Hampshire Gazette.

SHEEP AND WOOL.

The "Bulletin des Sciences Agricoles," for July 1827, contains a review of a German work on Sheep and Wool, by J. C. Ribbe—published at Prague, Bohemia, from which we have translated the following, save what is enclosed in brackets.

The author adopts the opinion of Linnæus, that all the different kinds of sheep which exist are derived from a common stock, the *Ovis Argalis*,

[or the wild sheep which inhabit the Rocky Mountains of Asia and Greece.] The largest species of sheep in Europe is the breed of Flanders, which the Dutch imported from India, about two centuries ago. The smallest race is that of Scotland. [M. Ribbe refers to the Hebridean sheep—a small breed which weigh from four to five pounds per quarter when fat, and yield about one pound of wool of various colours.—These small animals frequently carry four or six horns. This breed was imported into Scotland from Denmark at a very early period. There is now a race in Denmark, which have four horns.] The national sheep of Hungary, have, in both sexes, straight horns, from 12 to 14 inches long. The wool is five or six inches in length, and so coarse, that it is fit for nothing but blankets.

Iceland has two sorts of sheep, one large, the other small. Their wool is brown, and the inhabitants do not shear it, but pull it off—a most cruel operation. The Icelanders make great use of sheep's milk.—These animals live all the year exposed to the severity of the weather, and their principal food in winter, is the moss, called Iceland moss, which they obtain under the snow.—The small species live among the steep rocks on the mountains, and sometimes a flock is carried over a precipice into a gulf by an avalanche, where they remain until the warmth of the bodies melt the snow which covers them, and announces to the owners, by the steam which ascends, the place into which they have been carried.

In the Crimea, and some countries near the Caspian sea, they have sheep that bear, when young, short curled wool of a blue, brown, or black color, which is an object of commerce. That the wool may remain in small curls, the Tartars cover the lambs with a linen cloth sewed close around them, which is not taken off until the animal is killed. [The lamb-skins are celebrated, being damasked as it were, by clothing the animal.] In some of the vast forests of Russia, there are sheep which live in a wild state; the animals which are so much affected with the sounds of drums and trumpets, that they begin to run, leap and dance, as soon as they hear them; and they continue these motions until overcome by excitement and fatigue, they are no longer able to flee from their enemies.

[The largest breed of sheep in the world is the fat-tailed variety; it is raised in central Asia, China, Persia, Africa, &c. The tail is a mass of fat, and often weighing 30 pounds. Another variety of Asia is the long-tailed breed, with coarse wool; its tail sometimes drags on the ground.]

Europe did not possess any fine wooled sheep until the twelfth century. The Roman writers mention that fine wools and stuffs were imported from Spain, but this only proves that the Spanish sheep were better than those of the rest of Europe, In the twelfth century some African merchants sent to Cadiz a few sheep, the wool of which was remarkable for its fineness and whiteness. They were purchased by a Cadiz merchant, and placed on his country estate, where they succeeded, but he found no imitators.

About the year 1350, Peter, king of Castile, having been informed that there was a race of sheep in Barbary, which had precious fleeces, sent several persons into Morocco to buy a great number of bucks. From this epoch commenced the reputation of the wool of Castile. In the 16th century, when Cardinal Ximenes was the Spanish minister, complaints were made to him that the sheep of Castile had deteriorated. To remedy the evil, this minister determined to import a great number from Barbary; but as he could not obtain them by means of negociation, he kindled a war, and invaded Morocco.—The Spanish soldiers had orders to bring away as many sheep as they could; they pillaged the country, and returned to Spain with the precious plunder.

The principal breeds of Spain are those which the monks of the *Escurial* possess; those of the convents of *Gaudaloupe*, and of *Paular*; those of the duke *d' Infantado*, and of the counts of *Negretti* and *Montareo*. The sheep of the Escurial have the most beautiful wool; those of the Gaudaloupe are celebrated for their form and fleece; those of Paular have the head covered with wool and their neck full of wrinkles; those of Infantado are born with coarse wool, which afterwards becomes very fine, and those of Negretti have a strong and robust body, with fine wool. All these races are called merinoes, and were formerly the travelling flocks of Spain; since the late wars, they have become stationary. All the fine races of sheep now in Europe, were derived from the merinoes of Spain.

A letter has been received by the President of the Pennsylvania Agricultural Society, on the subject of establishing a Fellenberg School in this state. Of the plan and scite alluded to in the letter, we do not desire to express an opinion; but upon the principles of the Fellenberg schools we presume there can be but one sentiment, that of approbation. In truth, so exceedingly judicious and proper do they appear, it is a matter of astonishment that they have to be introduced at this time of day.—*Penn. Gazette.*

From the Hampshire Gazette.

Mr Judd—The notice in your last paper, of a successful operation of Œsophagotomy, performed by Doct. Blood, induced me to inform you that simply tapping a creature into the paunch, and keeping the incision open, are all that is necessary to be done to any creature that is choked with a turnip, potato, or apple. Not one out of a hundred will die, provided the incision be made before the intestines become ruptured. Creatures when choked swell and are in great distress, from the pressure of the internal air. Tapping in such cases gives instantaneous relief, and either of the above substances will in the course of seven hours become so soft that the creature will discharge it at the mouth or swallow it. I never found any bad effects from tapping, out of more than twenty cases. The operation is very simple and safe, when rightly performed. Any person can inform himself while slaughtering a creature, by observing where the paunch adheres to the side. Tapping is the best remedy, I think, for the disease called blown or hoven. The effect of the wound is not so bad as the inflammation in the throat after giving alkali. A. L.

THE COFFEE TREE.

As it is not every one that has seen this singularly useful tree, a short description of it may be worth giving. It sometimes attains the height of 12 feet with a trunk of 15 inches in circumference, and very much resembles an apple tree of eight or ten years standing. The branches, which stretch all around like an umbrella, are extremely pliable; the bark is of a whitish color, and rather rough; and the leaves, in shape not unlike those of the citron tree, are of a glossy dark green.—The blossoms, white as the jessamine flower, and of a delicate fragrance, shoot out at the stem of the leaves. When the blossom drops, a small green berry appears in its place, which growing red as it ripens, like a cherry, contrasts beautifully with the green fruit and numerous fresh blossoms, which appear upon the tree at the same time.

LIGHTNING RODS.

The American Journal of Science contains the following observations of Professor Hare, of Philadelphia.

"I should not consider a metallic rod, terminating, without any enlargement of surface, in the water or the earth, as an adequate protection against lightning; but were such conductors to terminate in metallic sheets, buried in the earth or immersed in the sea, or *by a collection duly made as with the iron pipes, with which our city* (Philadelphia) *is watered, or the copper with which ships are generally sheathed*, I should have the most perfect confidence in their competency."

"It is not only important that the points of contact, between the metallic mass, employed to afford lightning an adequate passage, and the earth or water, in which it terminates, should be so multiplied as to compensate for the inferior conducting power of the earth or water; but it is also necessary that the conducting rod be as continuous as possible. When conductors are to be stationary, as when applied to buildings, they should consist of pieces screwed together, or preferably joined by solder, as well as by screwing. Where flexibility is requisite, the joints should be neatly made, like those of the irons in fall top carriages; and should be rivetted so as to ensure a close contact at the junctures.

"If a pointed rod be cut into parts so as to produce intervals, bounded by blunt terminations, its efficacy will not be much greater than if it had no point; because the fluid will in this case pass in sparks, instead of being transmitted in a current. It is on this account I object to chains, or rods joined by loops, or hooks and eyes."

Protracted Lactation.—Dr. Morton concludes, 1. That, if children are suckled for an undue length of time, that is, beyond the period of nine or ten months, they will be liable, in consequence, to inflammation of the brain. This proposition is supported by seven cases of children affected with cephalitis, where the period of lactation had been considerably protracted.

2. That the same effect will take place, where the milk is furnished beyond the above period to a child, though *that* child may not have been at the female's breast from the beginning. This is supported by only one case.

3. That if the disease in question be not developed at once by the said protracted lactation, a pre-disposition to cephalic disease will be established. Supported by eight examples.

4. That children too long suckled, when taken ill with other diseases, are much more liable to suffer in the head than children reared in a different manner.—*Medi. Chir. Review.*

The American Dictionary of the English Language, by Noah Webster, L. L. D. which is much looked for, is in press, and will be published as soon as a careful reading of the proof sheets will admit. It is supposed that the work will be completed about the close of the present year.

[*From Silliman's Journal.*]

ON FOREST, ORCHARD TREES, &c.

Rensselaer School, Troy, April 30, 1827.

Effects of light.—Clouds and rain have obscured the hemisphere during the last six days In that time the leaves of all the forests, which are seen from this place, have greatly expanded. But they were all of a pallid hue, until this afternoon.—Within a period of about six hours, they have all changed their color to a beautiful green. As the only efficient change which has taken place is, that we have a serene sky and a bright sun, we may say with confidence, that this change of color is produced by the action of the sun's rays.

Seven years ago next month, I had a still more favorable opportunity to observe this phenomenon, in company with the Hon. J. Lansing, late Chancellor of this State. While we were engaged in taking a geological survey of his manor of Blenheim, the leaves of the forests had expanded to almost the common size, in cloudy weather I believe the sun had scarcely shone in twenty days. Standing upon a hill, we observed that the dense forests on the opposite side of the Schoharie, were almost white. The sun now began to shine in full brightness. The color of the forests absolutely changed so fast that we could perceive its progress. By the middle of the afternoon the whole of these extensive forests, many miles in length, presented their usual green summer dress.

Direction of the branches of Trees.—A tree shoots out its branches like all other trees of the same species, external circumstances being similar. But there is one remarkable fact in the direction of branches, which I have not seen noticed in any publication.

All trees with spreading branches, accommodate the direction of the lower branches to the surface of the earth over which they extend. This may be seen in orchards growing on the sides of the hills, and in all open forests. But the crowded situation of the wild woods of our country, prevents a sufficient extension of branches to exhibit this character.

This fact presents a curious subject for the investigation of the phytologist. The question presented is this: What influence can the earth have upon the branches on the upper side of the tree, which causes them to form a different angle with the body of the tree from the angle formed by the branches of the lower side, so that all the branches hold a parallel direction to the earth's surface?

Hollow Trees.—The growth of trees is not influenced by any circumstance connected with their internal woody parts.

Mr Knight's central vessel hypothesis, and the authority of numerous able physiologists, seem to be at variance with this position. I shall not enter upon a discussion of the subject, but merely introduce a few facts.

The sugar maple, *(acer saccharinum,)* after being tapped and drained of its internal sap fifty years, and after the whole interior has become dead, grows as fast and presents an aspect as vigorous and blooming, as any sound tree of the same species and same age, which stands by its side.—For the truth of this fact, I refer to all manufacturers of the maple sugar. I suggested this opinion more than twenty years ago, and frequently afterwards, when I was employed among the tenants of Messrs. Livingston, McEvers, Ludlow, Cutting, and others, between the spurs of Catskill mountain. Every manufacturer with whom I conversed, in this native residence of the sugar maple, confirmed my opinion.

The common apple tree *(pyrus malus)* grows thriftily and bears abundance of fruit, many years after its interior is so completely rotted away, as to leave but a very thin hollow cylinder in possession of the living principle.

We prefer solid trees in our forests and orchards; because they have more strength to withstand the force of winds, and because the unfavorable circumstances, which caused the interior to decay, may effect the total destruction of the tree. But as all deposition of matter, in any way affecting the growth of the tree, are made between the bark and wood, after the first year, in the form of a mucilage, called *cambium*, it seems that the internal woody part has no influence upon the external growth.

Yours, respectfully,
AMOS EATON.

[Abstracts from Silliman's Journal—by the Editor of the Hampshire Gazette.]

WATER CEMENT.

In Southington, Con. is an inexhaustible quantity of hydraulic limestone. It is burnt in a common kiln, like quick lime, and is next ground fine with mill stones. One part of it is then mixed with two of sand, to form it into mortar. It soon becomes firm and secure under the water. It is employed in the construction of canals, mill dams, cisterns, cellar walls, vats, and all kinds of mason work exposed to water. It has been used in the construction of the aqueducts and culverts on the Farmington canal.

FASCINATION OF SNAKES.

A correspondent of the Journal is "convinced by ocular demonstration," that the notion of a fascinating power in snakes is an utter fallacy and delusion. He thinks that birds flutter and hover round snakes and cats, to decoy them from their nests.

DOG TRAINE.

Dr Foot, at the military post at Sault St. Marie, near Lake Superior, describes the mode of travelling in that part of the world. Three dogs carry a man and his provisions and the traders travel all over the wilderness with them. The dogs are taught to turn, halt, and go by word of command. They are harnessed to the train or sleigh one before the other Dr Foot says he frequently rides over the river, and a mile or two round, drawn by three dogs, and sometimes takes his wife and child. Those who travel with dogs, sleep in the woods in the coldest nights; they dig away the snow in a thicket, build a large fire, spread boughs of evergreens, and then lie down by the fire, dogs and all, and sleep comfortably all night.

[Further extracts from Prince's new work on Horticulture, now in press.]

RASPBERRIES.

This fruit was originally discovered by the Greeks, growing on Mount Ida, whence the specific name *Idæus*. At present we have not only many varieties of the above, but several other species, which are cultivated for their fruit in our gardens: among which the Common Red, which is sent to our markets in immense quantities, and is largely used in the making of raspberry brandy; is of fine flavor and much esteemed, and is the most productive; also the White and the Red Antwerp, which are of very large size and high flavor—of these the White is generally preferred—they are both productive and excellent fruits. The American White and American Black are inferior in flavor, but are nevertheless esteemed by many persons, particularly the white variety.—The Twice Bearing, if properly managed, is quite an acquisition. In general, they produce one crop at the usual period, and a less one late in the season, but as a full crop is most desirable, it is said to be best to cut off the whole of the stalks quite to the ground early in the spring, in order to force a strong growth of young wood, which will yield a large quantity of fruit, as it is the wood of the same summer that produces the fall crop. The Red Cretan is a raspberry of delicate flavor; the Cane is also considerably cultivated, and a number of others; the Purple Flowering is only useful as an ornamental plant, its fruit being of no value.

Raspberries may be increased by cuttings, layers, or by the young suckers which spring up in numbers from the root; the latter method is generally considered to produce the strongest and most fruitful. Although this plant is no way difficult as to soil, still it is preferable that this should be fresh and rich, and as it does not flourish for a long period on the same round, it will be necessary to form new plantations every three or four years. The situation should be half shady, or in a location not exposed to excessive heat. Every autumn the old wood should be thinned out, and only that which is young and thrifty allowed to remain—at the same period some well rotted manure should be dug in around them.

CURRANTS.

This fruit will flourish in all expositions, and in every soil, except one absolutely wet. The plants are generally increased by cuttings, with which the same precautions should be used as prescribed for those of the gooseberry. In autumn the old wood should be trimmed out, and it would be well at the same time to have manure dug in around them. There are a number of varieties, among which are the Common Red and White, the Dutch Red and White, the Champagne, or Transparent Pale Red, Wilmot's Pale Red, the Black English, and Black American—the foregoing are those cultivated for their fruit. There are also the Yellow Flowering, with fruit similar to the Black American, but of larger size and better flavor; and the Yellow Flowering, with yellow fruit, but not productive—these two are very ornamental for their flowers; also the Variegated Leaved, with red fruit—the Black English, with variegated leaves—and a number of others, calculated more for ornament than use.

STRAWBERRIES.

The situation should be an open exposure, but somewhat sheltered from the excessive heat of noon-day. Moisture, and a degree of shade, are natural to this plant, as may be inferred from the situations it occupies in a mild state. A sandy soil may cause an earlier maturity of the fruit, but will not be conducive to an abundant yield.—A light rich loam is considered the most favorable, being soft and pliable, so that the runners may easily penetrate it with their roots. A mixture of bog earth is found advantageous; and, in

enriching the soil, cold manures are to be used. In the southern States, I should consider the best situations for this plant to be the north sides of hills, or the shady borders on the north side of a garden fence or a hedge. The plantations in the vicinity of New York, and which furnish that city with this fruit, are generally made by plain farmers, on good loamy soils, which are light and mellow, occupy open and unsheltered fields. The yield from them is immense, and they are considered among the most advantageous appropriations of the soil.

FORMING BEDS.

The most favorable season to form beds, is in September or October, which gives the plants sufficient time to establish themselves, and become well rooted before the ground freezes, and thereby prevents their being thrown out by the winter frosts. In forming these beds, you should select strong and vigorous runners, or offsets, in preference to taking old plants; these may be placed in beds from three or four feet wide, and from ten to twelve inches apart each way, according to the extent to which the variety usually expands in its growth. Most varieties do best when allowed to run together, so as to form a complete matt—as in this case one forms a shelter for the other from excessive heat—but where the fruit is desired of the largest possible size, the plants must be kept distinct, and at the distance of one foot asunder, and the runners should be cut off as they appear. By some persons it is recommended to make plantations in the autumn, as before stated, and to keep them divested of all runners till after the maturity of the fruit the ensuing season.

As beds of strawberries generally want renewing every two or three years, it will be necessary, in forming the new beds, to select the plants in the proportion of nine bearing plants to one barren; and, in order to do this with certainty, it will be best to mark them when in fruit. If, however, your beds are not encumbered with a superfluous number of barren plants, this precaution will not be indispensably necessary; though it is generally requisite with the varieties of hautbois, the red Chili, pine apple, and some others, which are apt to produce a great proportion of barren plants—and even, without proper attention, beds of these, and of some other kinds, will become almost totally unproductive.

With respect to the varieties of the Alpine, or monthly, it is preferable to form new beds every autumn, as the runners of the previous year produce a much greater quantity of fruit than the old plants.

LIMESTONE.

Professor Hitchcock, in his Agricultural Address, states that limestone capable of forming the water proof cement has been found in Southington, West Springfield, and at Mount Tom, and he remarks that we may expect to find it in other places in the valley of the Connecticut.

It has been known for many years that a coarse kind of limestone existed in Williamsburgh, Whately, Conway, Goshen, Chesterfield, Deerfield, Ashfield, Buckland, &c. Professor H. has recently burnt some pieces of this stone and converted it into quick lime. On being slacked, and mixed with a quantity of sand, it formed a dark colored mortar, which hardened as soon, and to as great a degree, as lime mortar in general.

Professor H. is not without hope that gypsum (plaster of Paris) may be found in the towns where the coal formation exists—viz. Springfield, West Springfield, South Hadley, Granby, Sunderland, &c. He says all light colored and soft rocks found in these towns should be examined with care. If they do not effervesce by pouring on oil of vitriol or aquafortis, they will probably prove to be gypsum. If they do effervesce, they are limestone.—*Hampshire Gazette.*

THOROUGHWORT.

There are numerous species of this plant, which are natives of our soil. This species has long been familiarly known throughout the U. States, by the various names of thoroughwort, boneset, Indian sage, crosswort, vegetable antimony, &c. It grows abundantly in low meadows and marshy situations. The stem is erect, and rises from two to four or five feet, perforating the leaves at each joint, and is hairy or woolly, and branches only at the top. The leaves are horizontal, serrated and rough, from three to four inches long, and about an inch broad at their base, gradually lessening to a very acute point, of a dark green, and covered with short hairs. The flowers are white, and appear in July an August. The medicinal properties of this very valuable plant have been thoroughly investigated by numerous persons, one of the first and most accurate of whom is Dr. Anderson, of New York. He deems it warrantable, to conclude, that it possesses many properties similar to those which characterize Peruvian bark, camomile, and other valuable articles used in medicine, but that these virtues reside in the greatest degree in the leaves. As medicinal preparations of this plant, the author recommends the decoction of the flowers and leaves; infusions of the same parts; the leaves in substance powdered—and a tincture of the flowers and leaves, prepared with proof spirits. The last form had better be expunged. It is said without hesitation, that the chymical properties of thoroughwort, as deduced from experiment, are in many respects exactly similar to the Peruvian bark; and that for its active medicinal virtues, particularly as a sudorific and as a tonic, it will not suffer by a comparison with any of the articles found in the vegetable kingdom. Among others, Dr. Barton, and Dr. Hosack have observed its efficacy as a remedy in the treatment of most febrile diseases, particularly intermitting and remitting fevers, yellow fever, and various other disorders; cutaneous affections, and diseases of general debility. If exhibited as a warm decoction, it often proves an emetic, and acts especially on the skin, producing copious perspiration; if in form of cold infusion or decoction, or substance, it acts as a powerful tonic. An infusion of thoroughwort has long been esteemed as an efficacious remedy in bilious colic accompanied by obstinate costiveness. It is directed in the quantity of a tea-cup full every half hour, until it operate downwards. In a similar manner, it has been successfully prescribed in dysentery, with the view of both its cathartic and diaphoretic effects. About two quarts of a strong infusion of thoroughwort, with the addition of an ounce of aloes, form an excellent purgative for horses and cattle.—*National Philanthropist.*

Boston and Providence Rail Road.—In their report, which makes ninety-four pages of letter press the commissioners say—"according to the estimates, the passages of persons will be equivalent to 50,000 over the whole length of the road at $1 each—the transportation in wagons equivalent to that of 8,450 tons through the route, 4625 tons at an average price of $4.75 per ton, and 3825 tons (7 1-2 cents per mile per ton) at $3.15 giving the gross receipts of $4,000; deducting from which 6,750 for expense of horses, carriages and drivers for conveying passengers; 2,506 for expenses of the heavy transportation; also ten per cent, on these amounts to cover any error by under estimates of these expenses, and allowing $4000 per annum for superintendance and repairs, making nearly 15,400, leaves a nett income of a little over $68,000."—*Boston Patriot.*

NEW ENGLAND FARMER.

BOSTON, FRIDAY, FEB. 8, 1828.

FREQUENT PLOUGHING, AND PLOUGHING IN RIDGES.

A writer in Loudon's *Gardener's Magazine* says "when a soil is tenacious, or abounding in stubborn vegetable matters, as in heath lands, it cannot be too completely exposed to the action of the air; but to light soils, which are in general deficient in organic decomposing matters, chemistry would say that ridging is accompanied by evils more injurious than can be compensated by the benefits obtained; for such light soils are easily pulverized whenever occasion requires, are so porous as at all times freely to admit the pervasion of the atmosphere; and, therefore, by this extra-exposure, the vegetable and animal remains are hastened in decomposing, and much of their fertile constituents evolved in the state of gas, or carried away by the rains, &c. without there being any crop upon them to benefit by them. Thus theory argues, and practice certainly seems to support, in this instance, her doctrines." Switzer, one of our horticultural classics, says, "rich heavy ground cannot well be ploughed too often, to make it light, and the better manure by killing the weeds; as light, poor ground, cannot be ploughed too seldom, for fear of impoverishing it."

ROOTS OF PLANTS.

"A root is annual, biennial, or perennial. In the two former instances, if the individuals to which they belong be allowed to perfect their seed, no care can protract their existence beyond the ensuing winter, however genial the temperature, &c., in which they are made to vegetate;—but, if the ripening of seed be prevented, it is undetermined how long they may in most instances be sustained in life. I have known mignonette continued in healthy vegetation for four years with this precaution. In all roots, and under any mode of management, the fibrous parts (radiculæ) are strictly annual; they decay as winter approaches, and are produced with the returning vigor of their parent in the spring. Hence the reason that plants are transplanted with most success during the season of their decay; for as the root almost exclusively imbibes nourishment by the mouths of these fibres, in proportion as they are injured by the removal, so is the plant deprived of the means of support; that sap which is employed in the formation of new fibres, would have served to increase the size of other parts.—The size of the root, I have always observed to increase with the poverty of the soil in which it is growing. Duhamel found the roots of some young oaks in a poor soil to be nearly four feet

long, though the stem was not more than six inches. The cause of this is evident; the nourishment which is required for the growth of the plant, can only be obtained by an increased wide extending surface of the root, and to form this, more sap is often required than the plant, owing to the poverty of the earth, can obtain to itself; in that case a soil is sterile, for the plant must evidently perish.

A root always proceeds in that direction where food is most abundant; from a knowledge of this fact we should be circumspect in our mode of applying manures, according to the crop and object we have in view. The soil in my own garden being shallow, never produced a carrot or parsnip of any size; but almost every root consisted of numerous forks thickly coated with fibres; digging two spades deep produced no material advantage, the gardener applying as usual, manure to the surface; but by trenching, and turning in a small quantity of manure at *the bottom*, the roots always spindle well, grow clear, and have few lateral fibres. For late crops of peas, which mildew chiefly from deficiency of moisture to the root, it is an object to keep their radiculæ near the surface for the sake of the light depositions of moisture, incident to their season of growth; hence it will always be found of benefit to cover the earth over the rows with a little well rotted dung, and to point it lightly in."—*Ibid.*

REMARKS ON SALT AS AN APPLICATION TO SOILS.

A writer in Loudon's Gardener's Magazine says, "I have lived very much near the sea beach as well as near salt-works; I have watched the effects of the sea breeze and salt spray, and always found it rather prejudicial to vegetation than otherwise. The pamphleteers will perhaps say that this was owing "to the saline particles not being distributed scientifically; they were either sown too thick or too thin, or not at the right season; the salt should be measured by the imperial bushel, and weighed by the patent beam and scales, by men of rank and science." I acknowledge that I possess neither rank nor science, but I hope I possess a common share of common sense, and, as Providence has ordered it, I possess rather more than a common share of experience; and I refer to the most sensible part of your readers, if a given distance from the sea would not determine the case with as great precision as weights and measures; but such point I could never find. We have all seen a heap of rank manure lying in a field; we have seen it destroy vegetation for several inches all round; then all at once vegetation sprung up most luxuriantly, then gradually diminished, till the effects were lost in the natural verdure of the field. But, when a heap of salt lies in a field, it, like the dung, destroys all vegetation round it; but where is the point of luxuriousness? where is so much as a fairy ring? no where to be seen: the pestilential effects of it diminish as gradually as those of the poison tree which we read of in the Island of Java; or, if certain vegetables seem to thrive, they are of a particular kind, more resembling marine than terrestrial natives, and are actually feeding on the murdered carcasses of their more delicate neighbors. Facts like these, might teach a child that salt was not a manure, although extremely good and useful for many things. It destroys weeds and worms; dead weeds and dead worms are an excellent manure. But, if destroying a perverse and rebellious generation of vegetables, to make room for a better, be manuring, then a naked summer fallow is manuring; or, if cutting off nine plants to make room for a tenth, be a manure, then a turnip-hoe is a manure; for, though only a piece of steel on the end of a stick, it has often procured me forty or fifty tons of turnips per acre instead of four or five. By way of explanation, I sow nearly four pounds of turnip seed per acre in drills thirty inches asunder, so that, without the hoe, they would be little better than so many rows of cress or mustard. "But," says the man of science, "salt enters into the constitution of plants and therefore must be manure." I grant that it does enter into the constitution of certain plants, and I have witnessed some extraordinary good effects from its application; and I could fill several sheets on that side of the question, but am engaged at present on the opposite side. It hardens the straw, that would otherwise be flaggy—it makes the grain plump, that would otherwise be shrivelled—in short, its uses are extraordinary, if applied with judgment; but to call it a manure, is a kind of false philosophy which I should like to extirpate from the rising generation, as it would only lead to futile experiments, foolish arguments and false conclusions. I make use of great quantities of salt every yea , and did so before the duty was taken off, both rock salt, and salt and ashes. I was then obliged to swear what I was going to do with it, and what I had done with it, and also give an account of the experiments I had tried with it, some of which have helped to make up the pamphlets I have read; but now I have no more trouble than if carting from a dunghill. I was at a salt-works a short time since, and, I suppose, the greatest salt works in Europe; I bought a three-horse cart full for ten shillings;—they loaded it into the bargain, only one of the men begged sixpence to drink, as he said he had made me a *good load*, and trod it well so as not to shake off. I thought he spoke true, and gave him the sixpence. I weighed it, and measured it, after getting it home;—it was *thirty-seven and a half hundred*, and measured *sixty-two* imperial bushels. Now, this was not salt and ashes, but fair, good salt, only not quite fit for a silver salt-cellar; so, if any one wants salt manure, [as they call it] I think I can tell them where the cheapest shop is. I asked a great many questions of the agent, and also of the neighboring farmers, the substance of which would occupy several letters; but all that I could write, or indeed all that others have written or could write, may be comprehended in the following parable:—A certain man had two sons; they were twins, very much alike in every thing, and in nothing more than in their delicate complexion, and weakly and sickly appearance—they were troubled with worms, a weak digestion, &c. One of them was put under a course of physic, which nearly killed him;—but he however got well, and grew quite fat and jolly; the other lingered on for some time, and died at last, although he had always as much roast beef and plum-pudding as he could set face to. The old man made the following remark, which passed current through the country; that physic fattened the one, and roast beef starved the other; and the puffing apothecary, who sold the physic, began to collect evidences of the marvellous cures which his medicines had performed, and employed certain scribblers to write in favor of it, some of whom over-shot their mark, and published treatises to prove the extraordinary feeding and fattening powers of Glauber's salts."

FARMS.

A writer in the Mass. Agric. Repository, vol. v. page 320, in treating "*on the extent of land* necessary for a farm, and sufficient to support a family well and independently," has the following among other valuable remarks: "We know men, active intelligent and industrious, possessed of thirty or forty acres of land, who are labouring for others, or taking charge of their neighbours' concerns, upon the avowed reason, that they cannot support their families on so small an extent of land. But they do not realize the actual efficiency of the soil. Undoubtedly there are many honourable exceptions to the observations we are about to make; as a general rule, however, it may be asserted, that THE FARMERS OF MASSACHUSETTS ARE YET TO LEARN THE IMMENSE PRODUCTIVE POWER OF A PERFECTLY CULTIVATED ACRE. Instead of seeking riches in augmenting the number of their acres, let them be sought in better modes of husbandry. As a general truth, we believe it may be asserted that every farmer in Massachusetts, possessed of one hundred acres of land, might divide them fairly by quantity and quality, into thirds, and by a suitable cultivation, make either third more productive than his whole hundred acres are at present. This is the operation at which those interested in the agriculture of Massachusetts ought to aim—to make farmers realize what cultivation can effect, and to teach the modes, by which the productive powers of the soil can best be elicited. It is indispensable for the success of every undertaking that a sufficient capital to carry it on, should be at command; and for that of farming in particular. When there is any deficiency with respect to that important particular, the farmer cannot derive sufficient profit from his exertions; for he may often be obliged to dispose of his crops at an under-value, to procure ready money; or he may be prevented from purchasing the articles he may require, though a favorable opportunity may present itself. An industrious, frugal, and intelligent farmer, who is punctual in his payments, (and hence in good credit) will strive with many difficulties, and get on with less money, than a man of a different character. But if he has not sufficient stock to work his lands properly—nor sufficiency of cattle to raise manure—nor money to purchase the articles he ought to possess, he must, under ordinary circumstances, live in a state of penury and hard labor; and on the first unfavorable season, or other incidental misfortune, he will probably sink under the weight of his accumulated burdens. In general, farmers are apt to begin with too small a capital. They are desirous of taking large farms, without possessing the means of cultivating them. This is a general error; for it makes many a person poor, upon a large farm, who might live in comfort, and acquire property upon a small one. No tenant can be secure without a surplus at command, not only for defraying the common expenses of labor, but in case any untoward circumstance should occur. When a farmer on the other hand, farms within his capacity, he is enabled to embrace every favorable opportunity of buying with advantage, while he is not compelled, if the markets are low, to sell with loss."—*Code of Agri.*

HULLED BARLEY.

Mr. Fessenden,—I have forwarded a few barrels of Hulled Barley to Mr. Russell. My object in so doing, is to introduce a cheaper quality than the foreign Pearl Barley which is sold at from nine to twelve cents per pound, by the barrel, to druggists. That which I manufacture is equal in *substance* to the imported. The only difference, is, the foreign is ground, till it becomes round, like shot. I am of opinion that Barley, which is well hulled, and the kernel as near whole as possible, contains more substance, and ought, in every respect, to take the place of Pearl Barley. The Barley which I offer, is well hulled, and the kernel nearly whole; and can be sold at six cents per pound by the barrel. Persons after becoming acquainted with this species of barley, will, I think, prefer it to Pearl Barley.

Yours with respect,

Barnet, Feb. 3d, 1828. H. STEVENS.

[Extract of a letter to the Editor of the New England Farmer, from a correspondent in Catskill, N. Y.]

Mr Editor—I am happy to say to you that I have derived much valuable knowledge from the perusal of the New England Farmer. It is truly gratifying to know of the praise worthy emulation to excel, amongst the farmers of New England. A weekly paper is well calculated to excite emulation, as it brings to the door of enterprising farmers, a full knowledge of what is doing in other places. Thus each enterprising farmer is benefitted by the labors and talents of an extensive community. However, it is much to be regretted, that your paper is not more generally read. It doubtless would be, were it not that a greater portion of the farmers, are wise enough, in their own estimation, without spending time and money, for writings on agriculture. With all their knowledge, I am persuaded but a few of them do fully appreciate the worth, and know how to procure the greatest quantity, and apply manures to the best advantage.

The use of Wood Ashes, when applied on a light, warm loam, (though many are not acquainted with their worth) will repay the first year three times their cost, in the rearing a crop of turnips. Let the ground be well ploughed in the spring, once at least more before sowing the turnips, twice would be better. After the last ploughing which should be immediately before the seed is sown, spread on an acre from 50 to 100 bushels of leached or unleached ashes; then harrow down the furrows, sow the seed, and give the ground a thorough harrowing. After the turnips are up, and the third leaf formed, give a dressing of plaster. Once hoeing will pay well. Pursuing this method, for the last 7 years, I have not failed of a good crop, any one year. In many districts of country in the neighborhood of the North River, are extensive ledges of lime stone, and wood near by, lime might be afforded for 10 cents per bushel, delivered on the land. Notwithstanding the cheapness and convenience of procuring it, no one to my knowledge, has ventured a cent to try its utility.

Swamp Muck abounds in many parts; yet but few farmers will take the trouble to ascertain its worth. The removal of it from the bottom and sides of ditches, would benefit low lands and help the uplands nearly equal to barn yard manure.—If the farmer would unite barn yard manure with muck, lime and ashes, he would find the result profitable in all the ordinary ways of using manure. These ideas or the like have been presented to the public, I presume, long before this time, yet a majority of farmers are determined to keep on their old course, as their fathers did so must the sons.

The turnips which I raise principally are a turnip resembling a white radish, white with red above ground. The turnip grows nearly two thirds above ground; they are not the tankard turnip, the flavor is more mild and sweet. I know no name for them, and call them the radish turnip; the seed formerly was brought from Holland.

I should feel myself much obliged, if some one of your correspondents, who have been acquainted with the value of lime, ashes, and swamp muck, would state the value of each as a manure, and the best manner of applying it to land. Also what kind of potato is the most profitable to raise for stock. Which amongst root vegetables, that is, turnips, the best kind, ruta baga, mangel wurtzel, sugar or blood beet, are to be preferred?

Yours, with respect, A FARMER.

The invention of *Lithographic printing*, has so facilitated the art of forgery in London, that the bankers are constantly in danger of taking spurious Bills of Exchange. A person's signature has recently been so exactly copied, that the writer did not know which of the two was the genuine bill.—*Balt. Amer.*

From the American Farmer.

BALSAM APPLE.

Tallahassee, Jan. 8, 1827.

Sir,—Enclosed you have a few seed of what is called, (in this country), balsam apple. You may be no stranger to the balsam apple, and I send it at a venture; if it is of no service, it is only my labor lost—and, on the same rule, I shall continue to send you such things as I may conceive to be useful or curious. I hope, for instance, to be able to send you some Bene seed by this mail, without stopping to inquire whether it may not be as common with you as with us. The balsam apple is a beautiful vine, well calculated for ornament and shade; it grows here from fifteen to twenty five feet, and proves very hardy, for it was green and growing at Tallahassee long after the last frost in December. The fruit, in shape, is very much like to cucumber, and taken green and half grown, it makes an admirable pickle for table use, and is preferred to every other kind of pickle at Pensacola. We have some making here, but I have seen none, and do not know whether any is yet sufficiently prepared. In its ripe state it turns a golden yellow, bursts open and displays its seed, coated with rich red matter, which many persons take pleasure in eating. In this state it is highly esteemed for its healing powers, being looked upon as a sovereign cure in fresh cuts, bruises, &c. For the medicinal purpose, it is preserved in spirits for winter and spring use. I have known it applied in several cases of fresh cuts, and never knew it fail to cure.

SEEDS.

For Sale at the SEED ESTABLISHMENT, connected with the New England Farmer Office, No. 52, North Market-Street, Boston;—Orchard grass, Lucerne, Herds grass, Red-top, Red and White Clover, Millet, genuine Fowl Meadow-grass Seed, (we receive this Seed direct from the person who raises it in Vermont, so there can be no doubt of its genuineness). Broom Corn, a few barrels White Field Beans, (very fine and pure, as the seed was all selected before planting). A few barrels Early Washington, and Dwarf Imperial Peas, Mangel Wurtzel, Ruta Baga, &c. &c.

BOOKS.

For sale at the office of the New England Farmer, a variety of standard works on agriculture, horticulture, gardening, breeding of cattle, &c. among which are Deane's New England Farmer—Farmer's Assistant—Sinclair's Code of Agriculture—Loudon's Encyclopedia of Agriculture—Memoirs of the Pennsylvania Agricultural Society—Hints to American Husbandmen—Lawrence's New Farmer's Calendar—Thacher's Orchardist—Coxe on Fruit Trees—Hayward on Horticulture—Fruit Grower's Instructer—Speechly on the Vine—M'Mahon's Gardener—Cobbett's American Gardener—Cobbett's Cottage Economy—Cobbett's Ride in France—Hogg on the Culture of Flowers—Kirwan on Manures—Hard on Sheep—Marshall on Gardening—Nicoll's Villa Gardener—Thorburn's do.—Holditch's Essay on Weeds—Agricultural Reader—Bonner on Bees—Bakewell on Wool—Gray's British Plants—Nuttall's Botany—Torrey's Botany—Farmer's, Mechanic's, and Sportsman's Magazine, &c.

OATMEAL, HULLED OATS, BARLEY, &c.

The Proprietor of the Seed Establishment connected with the New England Farmer office, has been appointed Agent for the sale of Stevens's Oatmeal, Hulled Oats, Hulled or Scotch Barley, Grotts, and Pearl Barley, in any quantity from a half barrel to a ton. Mr Stevens's reputation for managing these articles is well known and established in the Southern States, he having supplied a large part of that sold in the New York, Philadelphia, and Charleston markets for many years. None but the best of grain is used. An account of the Hulled Oats will be found in a letter addressed to Mr Quincy in this week's New England Farmer. A small quantity will be sent gratis to any gentleman disposed to give it a trial. Orders for any quantity of these articles, (which are warranted to be fresh, and packed in sweet casks) addressed to "John B. Russell, Proprietor of the Seed Establishment, No. 52 North Market Street, Boston," will be executed with promptness, *at the manufacturer's prices*, which are moderate, and will be invariable.

PRICES OF COUNTRY PRODUCE.

		From	To
APPLES, best,	bbl	1 75	2 00
ASHES, pot, 1st sort, - - -	ton.	105 00	105 00
pearl do. - - - -		112 00	115 00
BEANS, white, - - - - -	bush	1 25	1 50
BEEF, mess, 200 lbs. new, -	bbl.	9 75	10 00
cargo, No 1, new, - -		8 50	9 00
" No 2, new, - -			7 50
BUTTER, inspect. No. 1. new,	lb.	14	16
CHEESE, new milk, - - - -		7	10
skimmed milk, - -		3	4
FLAX - - - - - - - -			
FLAX SEED - - - - - -	bush	90	1 12
FLOUR, Baltimore, Howard St	bbl.	5 87	6 00
Genesee, - - -		5 75	6 12
Rye, best, - - -		3 00	3 25
GRAIN, Rye - - - - -	bush	68	70
Corn - - - -		60	63
Barley - - - -		60	67
Oats - - - - -		40	42
HOGS' LARD, 1st sort, new, -	lb.		10
HOPS, No 1, Inspection - -		8	10
LIME, - - - - -	cask	70	1 00
OIL, Linseed, Phil. and Northern	gal.	77	78
PLAISTER PARIS retails at	ton.	2 75	3 00
PORK, Bone Middlings, new, clear	bbl.	19 00	20 00
navy, mess, do.		14 00	15 00
Cargo, No 1, do. - -		13 50	14 00
SEEDS, Herd's Grass, - -	bush	2 25	2 75
Clover - - - -	lb.	8	10
WOOL, Merino, full blood, wash		43	55
do do unwashed		20	25
do 3-4 washed		26	34
do 1-2 & ¼ do		23	30
Native - - - do		22	27
Pulled, Lamb's, 1st sort		40	45
2d sort		30	35
do Spinning, 1st sort		30	35

PROVISION MARKET.

BEEF, best pieces - - - -	lb.	8	12
PORK, fresh, best pieces, - -		7	8
" whole hogs, - - -		6	7
VEAL, - - - - - - - -			
MUTTON, - - - - - -		4	8
POULTRY, - - - - - -		8	12
BUTTER, keg & tub, - -		15	18
lump, best, - - -		18	20
EGGS, - - - - - - - -		22	25
MEAL, Rye, retail, - - - -	bush		80
Indian, do. - - - -			80
POTATOES, (new) - - -		40	50
CIDER, (according to quality)	bbl.	2 00	3 00

MISCELLANIES.

Whatever diversity of opinion may be entertained respecting the merits of the *subject* of the following eulogy, we believe all persons of taste will award the meed of praise to the *poetry*.

If Mr. Fessenden thinks the following lines (written by an American who visited Napoleon's grave on the Island of St. Helena shortly after his death), worthy a place in his paper, he will oblige a subscriber by insterting them.

THE GRAVE OF NAPOLEON.

Lorn is the rock, and boundless is the wave,
Where the weird sisters dug Napoleon's grave:
A castled steep—the sea forever pours
A requiem round those solitary shores.

No tender brother stood beside his bed,
No weeping consort held his drooping head,
A few sad followers, faithful to the last,
Watch'd the quick changes that his face o'ercast.
Saw the fix'd eye, with lingering lustre view,
His boy's bright portrait, as he bade adieu;
Sublime in death, he said, with hope inspir'd,
"My son, the head of armies!" and expir'd.

Near one small fount, in yonder glen of green,
Where cliffs stupendous guard the sacred scene,
And strangers tread with noiseless step the glade,
Lest the rude echo should thy rest invade—
Great shade of fame! Where hath thy spirit fled,
In the dark regions of the unknown dead?
Where is the arm which ruled, with wondrous power,
O'er kings and kingdoms in a happier hour?
Where is the form, which on yon Alpine height,
The Italian realms beheld with pale affright?
Which seem'd to travel over space and time,
The gaze of crowds—the wonder of each clime;
While Europe, trembling, saw with hopeless eye,
The wing'd artillery, like a whirlwind fly!
Where is he now? Go, ask the watchman there,
Whose armour glistens in the mid-night air.
He points in silence, to the lonely tomb,
Where Bertrand wept in agonizing gloom!

Oft will the pilgrim to the East, pause here,
Muse on this spot, and shed a pitying tear;
That his vast genius, and his mighty mind
Should sink, by mercenary foes confined.
Oft will the sons of ocean check the oar,
And drop their anchor near this sainted shore;
Through the dark winding valley slowly turn,
And, pensive, gaze at great Napoleon's urn.
Here, many a tongue will pay the tribute due,
To Bertrand's heart, so loyal and so true;
Who shar'd his glory, and who shar'd his grief,
A voluntary exile with his chief.

Here England's Genius yet may weep the day,
Th' illustrious captive felt her cruel sway;
And lingering, died, with slow consuming pain,
Alas! to England an eternal stain!

Farewell, great chieftain! Thy immortal name
Stands yet unrivall'd on the rolls of fame.

He that is without name, without friends, without coin, without country, is still at least a man; and he that has all these is no more.

New Species of Brilliants.

At a ball in Calcutta, a lady, remarkable for the splendor of her dress and ornaments, attracted the eyes of all the company, on entering the ball room. Rows of brilliants, which threw around her a light like that of the fabulous carbuncles of the Arabian Nights, glittered down her dress, and eclipsed all the jewels in the room. When the other ladies, desirous of examining her sumptuous ornaments, drew near, and began to pry into the mystery, it was discovered that the ingenious fair one had imprisoned some hundreds of fire flies in little bags of muslin, the *ventus textilis* of Petronius; and that proud to adorn so much beauty, they fluttered as she moved, and gave her the appearance of being decked out with jewels of living fire.—*London Weekly Review.*

An Irish gentleman lately fought a duel with his intimate friend, because he jocosely asserted that he was born without a shirt to his back. About as rational as duels in general.

Going down hill.—Mankind often exhibit a propensity to hasten the descent of those who appear to be going down hill, and are always ready to fall upon the fallen. Hence the truth of Ovid's comparison, who likens a man of broken fortune to a falling column, the lower it sinks the greater weight it is obliged to sustain.

Deaths from burning Charcoal.—Two coloured persons, man and wife, by the name of Williams, were found dead in their bed, at the house of a Mr Heath in East Hartford, on Thursday morning last. Previous to their retiring to bed, they placed a kettle of burning charcoal in the room in which there was no fire-place, which was undoubtedly the cause of their death.

Rules for young Tradesmen and Apprentices.—Be careful not to encumber yourself with a house of greater rent than the current profits of your business will easily pay. Many young beginners have half undone themselves by want of foresight in this one article. Quarter days are clamorous visitants, and their dues must be sliced off from the capital stock, if the product does not swell in proportion to the demand. Therefore, before you attempt the dangerous experiment, make the most exact estimate possible, of the expenses you may incur, and the prospects you have to make the balance even; and rather trade within your compass than beyond it; it is easy to enlarge your risk, but not to contract it; and once out of your depth, it is a great hazard, if ever you recover your footing any more.

Intoxication in all liquors.—Brandy kills the soonest; it takes most rapidly to the head, and tinges the face to a crimson or livid hue. Rum is probably the next in point of fatality, and then gin and whiskey. The most dreadful of all liquors is rum when it is not very old. It is such certain death to Europeans in hot climates, that the sale of new rum is prohibited in our southern colonies by the most severe laws. But when a man talks of the effects of brandy, rum, or gin, or indeed of wine of any sort, he is erecting a theory upon a shadow. What ninety-nine men in a hundred drink as brandy, is no more that liquor than it is champagne. Most of the brandy drank in public houses, or bought of inferior retailers, is nothing more than spirits of wine diluted and flavored.—The Hollands sold by publicans, is a mixture of gin and whiskey. As to gin, it is a liquor as different from itself as table beer is different from pure alcohol; much of this liquor is composed of mineral acids, or turpentine, and other rank poisons; if diluted and exposed to the atmosphere, it is covered with putrid film; and one dose to a person, not accustomed to dram-drinking, may occasion death.

ESTABLISHMENT FOR SEEDS.

We have now for sale, at the office of the New England Farmer, No. 52 North Market Street, Boston, the largest variety of Seeds to be found in New England,—mostly of the crops of 1827. The greatest care has been taken to have them raised by our most experienced seed-growers, and to have the sorts perfectly genuine. The following comprises our most prominent kinds.

Artichoke, Green Globe
Asparagus, Devonshire
Gravesend
Battersea
Large White Reading
Beans, (26 varieties, including the English broad beans, dwarfs and pole.
Beets, true Long Blood
Early Blood Turnip
Early White Scarcity
Yellow turnip rooted
Borecole
Brocoli, Early White
Early Purple
Large Cape
Cabbage, (22 varieties, including the Russian, and common kinds, early and late.
Cardoon.
Carrots, Altringham
Long Orange
Early Horn
Blood Red (for West India market)
Lemon
Purple, (fine sort)
Cauliflower, Early and Late
Celery, White solid
Rose coloured solid
Italian
Celeriac, or turnip rooted
Chervil.
Chives.
Corn Salad, or Vettikost
Cress, Curled or Peppergrass
Broad leaved or Garden
Water
Cucumber, (8 varieties, including White and Green Turkey, &c.)
Egg Plant, Purple and White
Endive, Green & White curled
Batavian, for winter
Garden Burnet
Garlic Setts
Indian Corn, (several varieties)
Kale, Sea
Purple curled
Green curly Scotch
Leek, London
Large Scotch
Lettuce, 14 varieties
Melon, 11 varieties
Mustard, White and Brown
Nasturtium
Okra
Onion, 8 varieties, including the imported Madeira, Potatoe and Tree Onion
Parsley, 4 varieties
Parsnip, Large Dutch swelling
Peas, 16 varieties
Peppers, 4 varieties
Pumpkins, Finest Family
Connecticut Field
Mammoth
Radish, 9 varieties
Rhubarb, for tarts, &c.
Salsafy, or vegetable oyster
Skirret
Scorzonera
Spinach, 5 varieties
Squash, 7 varieties
Tomatos
Turnips, 15 varieties

Likewise, Esculent Roots and Plants, Field and Grass Seeds, Pot and Sweet Herb Seeds, Medicinal Herb Seeds, Bird Seeds, and more than 200 different kinds of Ornamental Flower Seeds.

As the *variety* and *quantity* of Seeds kept at this Establishment are by far greater than at any other place in New England, orders for the British Provinces, the West India market, or the Southern States, can always be executed with promptness, at satisfactory prices. Dealers in Seeds and Country Traders supplied, at wholesale or retail, on the best terms.

We have now on hand, of this year's growth,
200 lbs. Mangel Wurtzel & Sugar Beet, raised by J. Prince, Esq.
200 lbs. Onion Seed, Red, White and Yellow.
275 lbs. true Blood Beet, raised in Roxbury
250 lbs. Carrot, various kinds
250 lbs. Radish, superior quality
200 lbs. English Turnip, raised in Roxbury
100 bushels Peas, early and late—[We have about 50 bushels of the Early Washington Pea, which was pronounced by the few who could obtain it last year—as our supply was small—the earliest and most productive of any brought into the Boston market.

Among the new vegetables we have introduced, and which are not common in the Boston market, are the Early Russian Cucumber, [very early] Camperdown Lettuce, Grass Pea [for winter use] Purple Carrot, Giant Asparagus, Lima and Valparaiso Squash, Siberian Parsley, [hardy] Russian Cabbage, Yellow Malta Turnip, Celeriac, Finest Family Pumpkin, Lady's Finger Pea [a new and fine marrowfat] New Nonpareil Pea, [a new marrowfat, very prolific, and of delicious flavour] New Zealand Spinach, and Rotterdam and Bonavista Bean. [The Bonavista is a new *Dwarf Shell Bean*, by many considered equal to Lima Beans—and to this good quality may be added their very ornamental appearance when loaded with their beautiful white flowers; they grow nearly two feet high.]

Traders in the country, who may wish to keep an assortment of Garden Seeds for sale, are informed they can be furnished, at this Establishment, with boxes containing a complete assortment of the seeds used in a kitchen garden, on as favourable terms as they can be purchased in this country, neatly done up in small papers, at 6 and 12 cts each—warranted to be of the growth of 1827, and of the *purest quality*. Ornamental Flower Seeds will be aded on the same terms, when ordered, as well as Peas, Beans, Early White Sweet Corn, &c. of different sorts.

☞ Catalogues of the whole Establishment, with directions for cultivating the more rare and delicate sorts, comprising a pamphlet of 40 pages, furnished gratis.

White Mustard Seed.

For sale at the office of the New England Farmer, the best English White Mustard seed, by the pound or bushel.

☞ Published every Friday, at *Three Dollars* per annum, payable at the end of the year; but those who pay within sixty days from the time of subscribing, are entitled to a deduction of *Fifty Cents*.